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| APPLICATION NO.                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |
|--------------------------------------|-------------|----------------------|-------------------------|------------------|
| 10/020,605                           | 12/11/2001  | Bharadwaj S. Amrutur | 10010107-1              | 6541             |
| 7590 07/13/2004                      |             |                      | EXAMINER                |                  |
| AGILENT TECHNOLOGIES, INC.           |             |                      | TORRES, JOSEPH D        |                  |
| Legal Departme                       | ent, DL429  |                      |                         |                  |
| Intellectual Property Administration |             |                      | ART UNIT                | PAPER NUMBER     |
| P.O. Box 7599                        |             |                      | 2133                    |                  |
| Loveland, CO 80537-0599              |             |                      | DATE MAILED: 07/13/2004 |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

| ₹                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Application No.                                                                                           | Applicant(s)                   |  |  |  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|--------------------------------|--|--|--|--|
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 10/020,605                                                                                                | AMRUTUR ET AL.                 |  |  |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Examiner                                                                                                  | Art Unit                       |  |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Joseph D. Torres                                                                                          | 2133                           |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                           |                                |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |                                                                                                           |                                |  |  |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                           |                                |  |  |  |  |
| 1) Responsive to communication(s) filed on 17 Ma                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | ay 2004.                                                                                                  |                                |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☒ This                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.                                              |                                |  |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                           |                                |  |  |  |  |
| closed in accordance with the practice under E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | x parte Quayle, 1935 C.D. 11, 45                                                                          | 3 O.G. 213.                    |  |  |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                           |                                |  |  |  |  |
| 4) Claim(s) 1-33 is/are pending in the application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4) Claim(s) 1-33 is/are pending in the application.                                                       |                                |  |  |  |  |
| 4a) Of the above claim(s) 11-33 is/are withdrawn from consideration.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                           |                                |  |  |  |  |
| 5) Claim(s) is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                           |                                |  |  |  |  |
| 6)⊠ Claim(s) <u>1-10</u> is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                           |                                |  |  |  |  |
| 7) Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                           |                                |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | election requirement.                                                                                     |                                |  |  |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                           |                                |  |  |  |  |
| 9) The specification is objected to by the Examiner                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                           |                                |  |  |  |  |
| 10)⊠ The drawing(s) filed on <u>11 December 2001</u> is/are: a) accepted or b)⊠ objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                           |                                |  |  |  |  |
| Applicant may not request that any objection to the o                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | frawing(s) be held in abeyance. See                                                                       | 37 CFR 1.85(a).                |  |  |  |  |
| Replacement drawing sheet(s) including the correction                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                           | •                              |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Exa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | aminer. Note the attached Office                                                                          | Action or form PTO-152.        |  |  |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                           |                                |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents</li> <li>2. Certified copies of the priority documents</li> <li>3. Copies of the certified copies of the priori application from the International Bureau</li> <li>* See the attached detailed Office action for a list of</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | have been received. have been received in Application ity documents have been receive (PCT Rule 17.2(a)). | on No d in this National Stage |  |  |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | _                                                                                                         |                                |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 4)                                                                                                        | (PTO-413)                      |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  Paper No(s)/Mail Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                                           | atent Application (PTO-152)    |  |  |  |  |

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#### **DETAILED ACTION**

#### Election/Restrictions

Applicant's election without traverse of Group I, claims 1-10 in the reply filed on
 May 2004 is acknowledged.

Claims 11-33 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 07 May 2004.

This application contains claims 1-33 drawn to an invention nonelected without traverse in the reply filed on 07 May 2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

#### **Drawings**

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: '2' in line 16 of page 7 and '7' in line 11 of page 8. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing

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figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-10 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimmitt; Myles (US 6738935 B1).

35 U.S.C. 102(e) rejection of claims 1 and 6.

Kimmitt teaches a serial communications system (See Abstract in Kimmitt; Note the Abstract teaches that data words are serialized for transfer over a serial link) comprising: a scrambler for converting received data into scrambled data (Scrambler 54a-54d in Kimmitt is a scrambler for converting received interleaved data into scrambled data; Note: Interleaved data is data); and an ECC encoder for converting said scrambled data into ECC-encoded data (Parity and Control ECC Encoder 26 in Figure 3 of Kimmitt is an ECC encoder for converting said scrambled data into ECC-

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encoded data). Note: the system in Figure 3 clearly provides a method for carrying out the steps in claim 6.

35 U.S.C. 102(e) rejection of claims 2, 7 and 8.

Kimmitt teaches a serializer for converting said ECC-encoded data into serialized data (serializer SERDES A-D in Figure 2 of Kimmitt is a serializer for converting said ECC-encoded data into serialized data); wherein the ECC-encoded data includes frame alignment information (col. 15, lines 26-33 in Kimmitt teach that R1<a:d> (TXCE19) parity bits are used as frame alignment information; see col. 16, lines 35-67 and col. 17, lines 1-67 in Kimmitt for details); and the system further comprises a receiver for receiving said serialized data and converting the serialized data into data frames based upon the frame alignment information (the Reciever in Figure 7 of Kimmitt is a receiver for receiving said serialized data and converting the serialized data into data frames based upon the frame alignment information).

35 U.S.C. 102(e) rejection of claims 3 and 9.

Kimmitt teaches a frame-recoverer for converting said serialized data into data frames (col. 17, lines 2-5 in Kimmitt teach that Multiplexer 182 in Figure 8 can re-frame across arbitrary word boundaries hence is a frame-recoverer for converting said serialized data into data frames); an ECC decoder for converting said data frames into ECC-decoded data and error indications (Parity Check Logic 186 in Figure 8 is an ECC decoder for converting said data frames into ECC-decoded data and error indications CE); and a

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scrambler for converting said ECC-decoded data into de-scrambled data (Descrambler 158 in Figure 7 of Kimmitt is a scrambler for converting said ECC-decoded data into descrambled data).

35 U.S.C. 102(e) rejection of claim 4.

Col. 15, lines 26-33 in Kimmitt teach that R1<a:d> (TXCE19) parity bits are used as frame alignment information; see col. 16, lines 35-67 and col. 17, lines 1-67 in Kimmitt for details.

35 U.S.C. 102(e) rejection of claim 5 and 10.

Kimmitt teaches said ECC encoder applies an error correction code in converting said scrambled data into said ECC-encoded data (Parity and Control ECC Encoder 26 in Figure 3 of Kimmitt applies an error correction code in converting said scrambled data from Scrambler 54a-54d into said ECC-encoded data).

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Jou; Yu-Cheun (US 6389000 B1) teaches a method and apparatus for maximizing system throughput and increasing signal diversity by dynamically multiplexing signals onto multiple carriers in a spread spectrum communication system.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (703) 308-7066. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (703) 305-9595. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2/17-9197 (toll-free).

Joseph D. Torres PhD